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The Role of Liminality in Transitioning and Learning from Project Failures

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ABSTRACT

In the information technology project management literature, much has been written about the types of project failures and reasons for project failure. However, less research has focused on how project managers cope when a project in which they have been managing is considered a failure. In this study, we examine how project managers transition and learn from project failures that are due to termination of the project before it was completed, or due to a project that was completed but had a disappointing result. Specifically, we focus on the concept of liminality that occurs due to project failure, which is a state of ambiguity during a time of transition. The results of this study will be useful in understanding how project managers effectively (or ineffectively) transition to new projects and learn from failure.

Keywords

Project failure, liminality, project transition, learning from projects

INTRODUCTION

Project managers are responsible for ensuring projects remain on time, on budget, and meet required functionality; however, this is challenging, particularly in the domain of information technology project management. The most recent Chaos report from the Standish group identifies as many as 70% of information technology projects in 2015 were challenged or failures. Most project managers will have a project that does not conclude as intended either due to early termination of the project or due to a result that was less than desirable. Therefore, this study explores if the perception of “failure” or “disappointment” impacts the project manager as s/he transitions to a new project and/or seeks to learn from the experience gained from the project.

Much has been written about why information technology projects fail. Prior research has identified categories for project failure (e.g., Lyytinen and Hirschheim 1987), taxonomies for project failure (e.g., Dwivedi et al. 2013), or studies that examine specific reasons for project failure, such as poor budgetary controls (e.g., Conboy 2010). In the information technology project management domain, there are many definitions of project failure. Most definitions of failure focus on the abandonment or termination of a project. For example, Sauer (1993) defines failure when the interest in the project wanes and there is no continued development, operation, or maintenance of the system. Lyytinen and Hirschheim (1987) suggest failure occurs when the system is unable to function as intended, when the user is unhappy with the system, or when there are problems meeting budget or schedule constraints.

While it is a worthwhile goal to understand how to avoid information technology project failure, there are arguments that project termination is not necessarily a failure. For example, Boehm (2000), suggests that when a project is terminated, this might be the right decision for the organization. If the assumptions or the business environment changes between the time when the project is selected and when the project is being developed, it may be worthwhile to cancel the project. When a project is not delivering the benefits expected, then terminating the project may be the best outcome as opposed to persisting with development (Meyer 2014).

While the study of why information technology projects fail is important, there has been little examination of how project managers recover and learn from failure. In this research, we define failure as a project that is terminated prior to its completion (Shepherd et al. 2014) or a project that was completed, but the results were disappointing to the project manager in terms of the final deliverable provided to the client/customer (Ewusi-Mensah 2003) or meeting project constraints of time, cost, or functionality. Therefore, this research does not adopt the measure of failure in traditional information technology project research in which failure is defined as termination of a project

or a project that is challenged in that it does not meet the constraints of the iron triangle (i.e., time, cost, or functionality). Failure is defined from the perspective of the project manager. If the project manager views the outcome as a disappointment, regardless of whether or not the iron triangle was met or not, this study considers the project as a failure.

The choice of the definition for project failure enable us to examine some of the unanswered questions regarding the emotional impact a project manager may face after managing a project deemed as a “failure.” Little is known about how the perception of a project failure affects a project manager as s/he transitions to a new project and learns from the experience. The notable exception is the work of Shepherd and colleagues (e.g., Shepherd and Cardon 2009; Shepherd et al. 2014; Shepherd et al. 2011; Shepherd et al. 2009). Shepherd’s research examines how individuals move forward from project failures. Yet, missing in this prior research is whether or not liminality, which occurs during a period of transition where a person feels uncertain and unsettled, affects how a project manager recovers from project failure. This study posits that the perception of liminality associated with failure serves as a moderator in understanding the relationship between a project manager’s negative emotions towards failure and his/her ability to recover from the failure.

Therefore, this research seeks to answer the following question: *How does liminality and other factors impact how well project managers are able to recover from project failures a) in their transition to new projects and b) by learning from the failure experience?*

In the next section, we outline the key concepts of our research model that identifies factors impacting the ability of the project manager to learn from failure and transition to a new project. We focus much of our discussion on the concept of liminality since this is an unexplored aspect of understanding the ability of project managers to move forward from project failure. Next, we explain how we plan to test our model using a sample of project managers. Finally, we discuss the intended results and contributions of our research.

MODEL DEVELOPMENT

Recovery from Failure

Failure creates an opportunity for learning; however, there are times in which project managers struggle in using failure as a form of feedback for learning. In this study, we define *Learning from Failure* as “the sense that one is acquiring, and can apply, knowledge and skills” (Spreitzer et al. 2005, p. 538). The negative emotions that arise from failure are a powerful source for learning as individuals attempt to avoid failure in the future (Shepherd and Cardon 2009). Studies that examine how individuals learn and transition from a project failure have focused on projects that have a research and development orientation (Balachandra 1996; Shepherd et al. 2014; Shepherd et al. 2011); however, the ability to learn from failure and transition to a new project may vary for project managers that are managing projects that do not have a research and development focus.

The primary dependent variable in prior research studying the emotional impacts of failure has been *Learning from Failure*. Yet there are likely other impacts to the project manager after a failure. For example, the ease in which the project manager is able to let go of the prior project and begin the next project is known as *Project Transition*. After the failed project is over due to termination or completion, the project manager must transition to manage a new project. Therefore, in this study, we include *Project Transition* as an additional dependent variable.

Liminality

The word ‘liminal’ is from the Latin word of ‘limen’, which means ‘threshold.’ The concept of *Liminality* originates from the work of Van Gennep (1909), who characterizes the liminal phase as the transition phase in rites of passages by which a person moves from one social position to another. This three-phase process includes 1) a separation phase; 2) a transition or liminal phase; and 3) a phase of integration or incorporation into the new social position. Turner (1969) popularized the concept of liminality in the anthropology literature, describing this transitory or liminal phase as being particularly ambiguous and characterizing liminal entities themselves as “neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention...” (Turner 1969, p. 95). More recently in the management literature, the concept of liminality has been used to position temporary workers as ‘betwixt and between’ traditional organizational structures (Garsten 1999).

A liminal state arises when a person is temporarily engaged in work where there is an ambiguous organizational belonging, such as temporary employees (Garsten 1999), consultants (Sturdy et al. 2006), and freelance workers (Tempest and Starkey 2004). Sturdy et al. (2009) find that liminality often occurs in project-based work. As work becomes more project-based, a worker's sense of belonging and identity is centered around the project (Tempest and Starkey 2004). Therefore, project managers and project failures may be another context in which the concept of liminality can apply.

The ending or unexpected termination of a project can place a project manager in a liminal state, where prior routines and roles are unexpectedly shifted and the project manager finds himself / herself in a transitory state. During a project failure and/or a project termination, the project manager is often responsible for ending the current project by performing end-of-project tasks before transitioning to a new project. In that role, project managers can be left in a state of liminality filled with unrest and uncertainty. Being in a liminal space has been characterized as a 'profoundly unsettling experience' (Sturdy et al. 2006, p. 930) due to the disruption of routine, organizational identities, and rules. In this study, we hypothesize that a project manager is in a liminal state when experiencing a project failure.

Although a liminal state is characterized by ambiguity, insecurity, and uncertainty, it also offers the opportunity for growth and learning. Free from traditional boundaries and constraints, the liminal experience has been identified as providing opportunity for increased creativity (Sturdy et al. 2006), as well as for reflection and experimentation (Wagner et al. 2012). As such, we position liminality as a moderating variable in the relation among negative emotions and learning from project failure and also as a moderating variable among negative emotions and transitioning to a new project.

Emotional State of Project Managers As a Result of Failure

The adage that "time heals all wounds" is a phrase that has been explored in the context of project failure. Shepherd et al. (2011) found in their study of project failure that *Time Since Project Failure* is longer, individuals have less negative emotions about the failure and have a stronger ability to learn from the failure. The failure of a project can trigger a strong, negative emotion reaction by a project manager (Shepherd and Cardon 2009).

When an information technology project is deemed a failure by the project manager or others in the organization, this can impact the emotional state of the project manager and generate *Negative Emotions*. An individual develops a work-related identity, and if this identity is challenged through a loss, the individual must re-assess their sense of self in the workplace (Conroy and O'Leary-Kelly 2014).

There are different coping mechanisms that an individual can use to deal with the sense of failure and challenge to one's work-related identity. One option is to develop a *Loss Orientation*. Individuals with a strong loss orientation tend to dwell on the loss in an attempt to understand the root causes of why the project failed (Conroy and O'Leary-Kelly 2014; Shepherd et al. 2011). This strong focus to understand why the project failed exhibited by a loss orientation has been found to have a moderating relationship between the time since the project failure and the negative emotions experienced by the project manager in research and development projects (Shepherd et al. 2011). While the loss orientation looks towards the past to understand "why the failure happened," another type of coping mechanism is a restoration orientation in which the individual seeks to "move forward." The *Restoration Orientation* helps an individual establish an identity in terms of who s/he will become as the project manager attempts to suppress the negative feelings toward the failure and seeks to be proactive for the next project (Conroy and O'Leary-Kelly 2014; Shepherd et al. 2011). The choice of a restoration orientation can lead to negative emotions as well as influence the relationship between the time since a project failure and the negative emotions about the failed project (Shepherd et al. 2011).

Research has examined how project failure creates a sense of grief for the project manager as s/he copes with the negative emotions associated with failure (e.g., Shepherd and Kuratko 2009). As part of this grieving process, the degree of *Community Support* can help the project manager progress to a state in which s/he can better learn from the failure (Shepherd and Kuratko 2009).

RESEARCH MODEL

Figure 1 is the research model developed from the literature on liminality and learning from project failure. While constraints prevent the description and development of each hypothesis, we summarize what has been already proposed and/or tested in the literature as opposed to the new relationships proposed by this research.

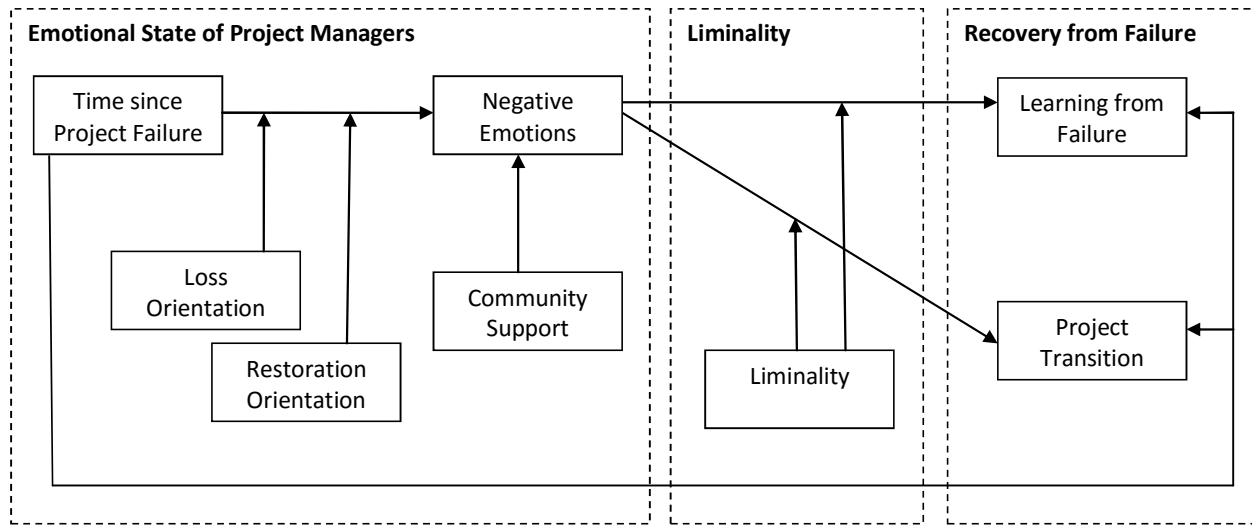


Figure 5: Research Model

Prior research has examined factors that influence *Learning from Failure*, such as *Time Since Project Failure* and *Negative Emotions* (Shepherd et al. 2011). Research has also examined the relationship between *Time since Project Failure* and *Negative Emotions* as well as role of *Loss Orientation* and *Restoration Orientation* as a moderating effect (Shepherd et al. 2011). *Community Support* has been posited to influence *Negative Emotions* in a conceptual paper, but has not been tested (Shepherd et al. 2009).

Liminality is a new construct that is part of this research model that has not been tested. We posit *Liminality* will have a moderating effect on the relationship between *Negative Emotions* and *Learning from Failure* and *Project Transition*. Further, prior research tends to focus on *Learning from Failure* as the final dependent variable, but this study considers *Project Transition* as a dependent variable as well.

RESEARCH METHOD

Data Collection

When possible, the survey instrument was developed using items adapted from the existing literature and previously tested instruments (e.g., Shepherd et al. 2011). The following constructs from our study were adapted from (Shepherd et al. 2011): *Loss Orientation*, *Restoration Orientation*, *Negative Emotions*, and *Learning from Failure*. However, much of the research that discusses these constructs and ideas are conceptual rather than empirical. Therefore, sometimes it was necessary to develop items based on the literature (e.g., *Community Support*, *Liminality*, and *Project Transition*). The instrument was pre-tested among a group of project managers to ensure understandability and consistency among the items. Thirty attendees at a Project Management Institute meeting completed a paper-based version of the survey. Based on the responses, changes were made to the instrument to ensure clarity and additional items from the literature on project failure were included. The final instrument is available in Appendix A.

We are partnering with a chapter of the Project Management Institute for data collection. The online survey will be sent to all members of the chapter by the chapter president. To detect moderate effect sizes in our model (i.e., effect size = 0.3 as noted by Cohen (1988)), we need a sample of 100 individuals (Soper 2015).

Data Analysis and Intended Results

Once the data is collected, we will analyze our data for appropriate construct validity (convergent and discriminant validity) as well as reliability (Straub et al. 2004). Once our measurement model is deemed appropriate for all

constructs, we will examine our structural model and the hypotheses implied by our research model (see Figure 1 above) using structural equation modeling. We will either use PLS or EQS to examine the structural model. The choice of analysis tool is dependent on the number of responses from our study.

As part of our instrument, we ask respondents to identify the type of failure that was most recently experienced. Individuals can select among the following choices: (a) the project was cancelled/terminated prior to the completion of the project based on my recommendation; (b) the project was cancelled/terminated prior to the completion of the project based on someone else's recommendation; (c) the project was completed, but I was disappointed with the project's result in terms of meeting the schedule, budget, or requirements for the project; (d) the project was completed, but I was disappointed with the project's result in terms of the final deliverable of the project; or (e) I have never had a project that was cancelled/terminated or had a disappointing result. Those answering that they have never had a project that was terminated or had a disappointing result will not be considered in the analysis. Assuming a sufficient response rate, we also hope to examine if the type of failure impacts the structural model. For example, the structural model explaining learning from failure and project transitions may be different among those that experienced failure due to termination of a project (options a and b) versus those that had a completed project with a disappointing result (options c and d). Our survey will allow us to examine our hypotheses while considering the type of failure experienced by the project manager.

CONCLUSION

This study examines an issue associated with project failure that has been seldom studied, which is how project managers learn from failure and transition to new projects. We created a research model that builds upon prior literature by recognizing how the time since failure and one's coping mechanisms affect a project manager's negative emotions. Additionally, this study introduces the influence of liminality as a factor that can impact the ability of a project manager to successfully learn from failure and transition to a new project.

Prior research on project failure and learning from failure has previously focused extensively on research and development projects that have been terminated. This study will examine failure from the perspective of a terminated project, as well as projects that have been completed with a disappointing result. This extension of the idea of failure to embrace disappointing results can offer additional insights on how different emotional states can influence the project manager's ability to recover from a failed project.

Failed and challenged projects are prevalent given the challenges associated with project management. The information technology project management literature has helped in understanding reasons for project failure. Although a project failure may or may not be the fault of the project manager, the project manager is often required to recover quickly by transitioning to a new project and/or obtaining feedback from the failure experience. This study helps in understanding these emotional factors that influence a project manager's recovery from failure.

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APPENDIX A

Table A.1 identifies the items for each of the constructs used in our model. Additional control variables (e.g. the size of the project, the nature of the project, and characteristics of the project manager) are being collected as well.

Table A.6: Survey Items

Construct	Items	Source
Time Since Failure	For the project that you are considering for this study, how has it been since the project was terminated or completed?	Adapted from Shepherd et al. (2011)
Restoration Orientation (Wording for these items were adapted if the project was completed, but had a disappointing result)	I was responsible for “cleaning up the mess” after the project termination.	Adapted from Shepherd et al. (2011)
	I helped other project team members transition to new projects.	Developed based on Conroy and O’Leary-Kelly (2014)
	Even though I was disappointed in the project’s termination, I did not express this disappointment to the project team.	
	It was the right decision to cancel the project.	
	My role as project manager was to help the other team members understand the decision to terminate the project.	
	Even though the project was terminated, I continued to be the liaison between the project team and management	
	Even though the project was terminated, I was responsible for performing the root cause analysis on the project termination.	
	Even though the project was terminated, other team members continued to look at me for leadership and guidance.	
Loss Orientation	I was disappointed that the project was a failure.	Developed based on Conroy and O’Leary-Kelly (2014)
	I felt a sense of loss at the end of that project.	
	I made sure I talk through my emotions about the failure with others.	Adapted from Shepherd et al. (2011)
	I actively worked with others to make sense of the failure.	
	I frequently sought out people to talk about my negative feelings generated from the project’s failure.	
	In my mind, I often went over the events leading up to the project’s failure.	
	I confronted my thoughts about the failure of the project.	
	I worked through my negative emotions generated by the project’s failure.	
Negative Attitudes	The failure is an ongoing source of disappointment.	Adapted from Shepherd et al. (2011)
	I feel more detached from coworkers as a result of project failure.	
	I continue to avoid closeness with my fellow colleagues as a result experienced in the failure.	
Liminality	After the failure of the project, I felt alone	Developed based on Borg and Soderlund (2014; 2015a; 2015b)
	After the failure of the project, I felt alienated	
	After the failure of the project, I felt like I no longer had a place in the organization.	
	After the failure of the project, I felt like my job was in limbo.	

Construct	Items	Source
	After the failure of the project, I felt uncertain about my next project.	
	After the failure of the project, it took time for me to let go of the issues related to the failed project	
Community Support	My colleagues in this PMI community helped me deal with the project failure	Developed based on Shepherd and Kuratko (2009)
	My colleagues in this PMI community helped me learn from the project failure	
	My colleagues in this PMI community helped me understand the project failure	
Learning from Failure	Because of the experience of the project failure, I am more willing to help others with their failures	Adapted from Shepherd et al. (2011)
	Because of the experience of the project failure, I am more tolerant of the others' shortcomings when it comes to projects	
	Because of the experience of the project failure, I am a more forgiving person at work.	
	Because of the experience of the project failure, I have learned to better execute a project's strategy	Adapted from Shepherd et al. (2011)
	Because of the experience of the project failure, I can more effectively manage a project	
	Because of the experience of the project failure, I have improved my ability to make important contributions to a project	
	Because of the experience of the project failure, I can "see" earlier signs that a project is in trouble	
	Because of the experience of the project failure, I now realize the mistakes that we made that led to the project's failure.	
Project Transition	It was hard to transition to a new project.	Developed by the authors
	It was difficult to let go of issues related to the failed project.	
	I did not want to abandon the failed project.	